

AVTK - UI toolkit of OpenAV

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Introduction

- Harry van Haaren
- OpenAV developer
- Coding Custom User Interfaces - OK
- Coding Custom Plugin UIs - lots to learn!
- Toolkits
 - GTK (Ardour)
 - NTK (Non tools)
 - AVTK (Fabla2 ...)

So Why AVTK?

- Audio Visual Tool Kit
- Creation of “multi media” widgets
- Interaction designed for power users
- Opportunity to improve UX in plugins
- Issue of embedding “general purpose” toolkits

AVTK Demo

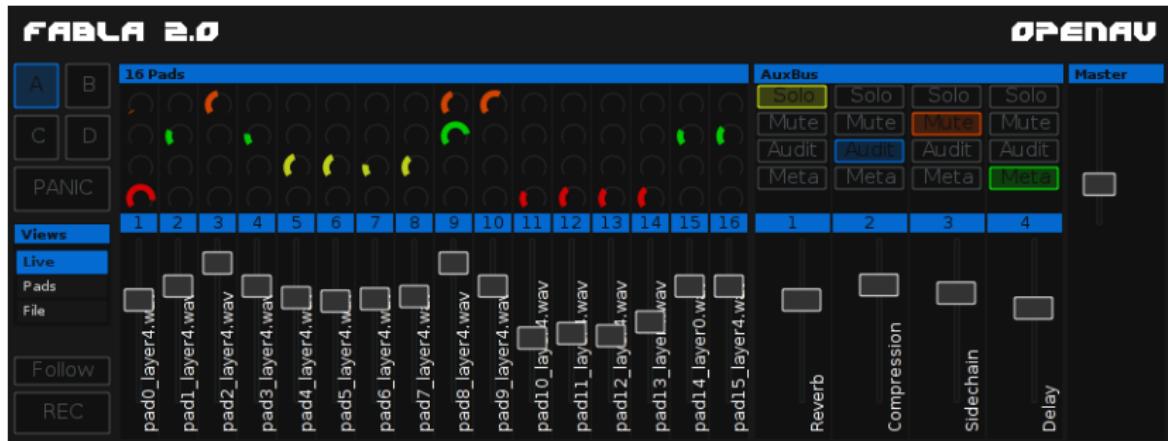


Figure: Fabla2, powered by AVTK

AVTK - Details

- PUGL Window / Embedding
- Cairo Anti-Aliased vector drawing
- C++ API Not ideal - more later
- Simple easy code
- `draw()` gets `cairo_t*`
- `handle()` gets `PuglEvent*`
- `value()` for the widgets state

AVTK - More Details

- “Canvas” style layout
- Containers like Group List ScrollArea
- Common value() interactions provided

AVTK - Themes

- “Developer” themes
- Themes for multiple widgets
- Widgets map theme colours
- Compiled in JSON strings (TODO)

AVTK - Power User Interface?

- Right click toggle default value
- Scroll operates most widgets
- Scroll wheel + Ctrl "select"
- Context used extensively
- Example: Load Audio Sample — Load Save File

AVTK - Tester

- Records and playback stream of PuglEvent
- Useful in a range of situations:
 - Debugging code
 - Unit tests
 - **Tutorials** users send logged events
widget value() verification
available **in the interface!**
- JSON serialized format

AVTK - Demos

- Widget
- Tester
- Fbla2

AVTK - Future

- If a serious effort:
 - C re-write for ABI stability
 - Easier to create language bindings
 - Gains vs time needed
 - Should OpenAV do this - priorities?
- Useful to others right now?
 - Probably not
 - Depends on expectation
 - API **not** stable (yet?)

Thanks for your time

Questions?